MOTOROLA SOLUTIONS

March 30th, 2012

VIA ECFS

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

In Re: WT Docket No. 11-69, ET Docket No. 09-234
Ex Parte submission

Dear Ms. Dortch:

Motorola Solutions, Inc. (MSI) hereby submits these comments in response to a recent series of ex parte filings by Harris Corporation (Harris), PowerTrunk, and others, in which issues were raised related to the Part 90 certification of PowerTrunk's Digital Land Mobile Radio (D-LMR) equipment for use in multiple frequency bands, including the 800 MHz band.

In its filing[1], Harris detailed multiple concerns regarding what it believes to be the potential negative impact of introducing the TETRA-like D-LMR into the 800 MHz band, and its belief that the spectral performance and operation of this equipment in the 800 MHz band was in some ways prohibited, or at least limited, by the 2011 TETRA NPRM and Waiver Order[2] (TETRA NPRM, TETRA Order), issued by the Commission in response to a 2009 waiver request from the TETRA + Critical Communications Association (TCCA, formerly known as the TETRA Association)[3].

In its response[4], PowerTrunk stated that its technology is not compliant with the ETSI TETRA standard and, as such, is not limited by the conditions detailed in the TETRA Order. PowerTrunk also argued that the certifications that it has received from the Commission for its D-LMR products verify that its equipment complies with the relevant Part 90 rules, and as such that equipment can be deployed by customers in the 800 MHz band, potentially including that portion of the 800 MHz band that encompass the NPSPAC Public Safety channels.

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[1] *See* Harris Corporation Ex Parte Notice, WT Docket No. 11-69, ET Docket No. 09-234, (filed March 16th, 2012)

[2] Amendment of Part 90 of the Commission's Rules to Permit Terrestrial Trunked Radio (TETRA) Technology and Request by the TETRA Association for Waiver of Section 90.209, 90.210, and 2.1043 of the Commission's Rules, *Notice of Proposed Rule Making and Order*, WT Docket No. 11-69, ET Docket No. 09-234, 76 FR 27296 ("*Waiver Order"*).

[3] *See* Request by the TETRA Association for Waiver of Sections 90.209, 90.210 and 2.1043 of the Commission's Rules, *Request for Waiver*, ET Docket No. 09-234 (filed Nov. 20, 2009)

[4] *See* PowerTrunk Ex Parte Notice, WT Docket No. 11-69, ET Docket No. 09-234, (filed March 23rd , 2012)

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MSI takes no position on whether the equipment for which PowerTrunk has received FCC certification complies with the relevant FCC Part 90 rules. However, some of the concerns regarding possible interoperability or interference issues with Public Safety incumbents that have been raised by Harris are shared by many in the Public Safety community.

In its comments filed in response to the TETRA NPRM, the Association of Public-Safety Officials-International, Inc. (APCO) stated that "APCO also notes that a 25 kHz TDMA technology such as TETRA would present serious frequency coordination and interference resolution challenges to the public safety community…"[5]. In that same proceeding, the National Public Safety Telecommunications Council (NPSTC) commented that "NPSTC believes enabling single-mode TETRA technology in the entire 406-512 and 806-824/851-869 MHz as proposed in the NPRM would hamper Public Safety interoperability."[6]

MSI believes these concerns are well-founded and therefore requests, in the interest of all Public Safety stakeholders, that the Commission affirms that any equipment certified under Part 90 to operate in the 800 MHz NPSPAC channels must meet any and all requirements that the Commission has identified to ensure Public Safety interoperability. A key example is the requirement that all devices certified to operate in the NPSPAC channels must, per 47 CFR § 90.203(i) "…have the capability to be programmed for operation on the mutual aid channels as designated in 47 CFR § 90.617(a)(1) of the rules."

In addition, MSI also makes the observation that the introduction of non-similar communication technologies into the NPSPAC channels could greatly increase the required effort by the relevant regional planning committees to ensure that interference to users occupying adjacent NPSPAC channels in that region is avoided.

For example, the deployment of a technology that is tested based on an assumed 25 kHz channel spacing into the NPSPAC bands, where the regional planning is based on 12.5 kHz center frequency spacing, may result in, at a minimum, the need for greater geographical spacing between adjacent channel users to avoid interference. In the worst case, it could require the complete revamping of a region's radio communications plan.

MSI recognizes that this is not currently an issue related to the FCC certification of any particular Part 90 device. However, unless a uniform requirement for testing with a frequency offset of 12.5 kHz from the center frequency to receive certification to operate in the NPSPAC channels is adopted, the impact to each regional plan will be a critical consideration when deploying such diverse technologies in the same geographic region.

[5] *See, e.g.*, Comments of APCO, WT Docket No. 11-69, ET Docket No. 09-234 p3 (filed June 27, 2011)

[6] *See, e.g.*, Comments of the National Public Safety Telecommunications Council, WT Docket No. 11-69, ET Docket No.09-234 p6 (filed June 27, 2011)

It is also important to note that the regional planning developed in the 800 MHz NPSPAC channels was based on reduced transmitter deviation required by the Commission and improved receiver performance voluntarily implemented by manufacturers[7]. The deviation was reduced to 4 kHz from the normal 5 kHz used with 25 kHz channel equipment. In general, digital technology subsequently introduced into the NPSPAC band to date has provided adjacent channel performance equal to or better than these initial analog requirements. Any technology introduced into the NPSPAC channels would need to do the same.

The avoidance of interference and the assurance of interoperability are two issues of critical importance to the users of Public Safety communications equipment. We therefore respectfully provide these comments to the Commission for its consideration, as it assesses the potential impact of the issues being raised in this proceeding to Public Safety users in general, and in particular those operating in the 800 MHz NPSPAC channels.

Respectfully Submitted,

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[7] *See* Development and Implementation of a Public Safety National Plan and Amendment of Part 90 Rules and Technical Standards for Use of the 821-824/866-869 MHz Bands by the Public Safety Services, *Report and Order*, GEN Docket No. 87-112, 3 FCC Rcd No. 4 ¶ 23 & 24 (1987)